

* For Examiners Reference *

We Claim:

1. A catalytic converter for the after-treatment of exhaust gas of an internal combustion engine, comprising:

a housing (2) having an internal space (9) for receiving exhaust gas therethrough, wherein surfaces of walls of said housing (2) facing said internal space (9) are at least partially provided with catalytically active material in a flow path between inlet and outlet means (10, 8) for exhaust gas, and

hollow domes (7) disposed on oppositely disposed walls of said housing (2), wherein said hollow domes (7) extend into said internal space (9), wherein free ends of said hollow domes are provided with said outlet means (8), and wherein the free ends of those hollow domes (7) on one of said walls (5, 6) extend beyond free ends of those hollow domes of the oppositely disposed wall (6, 5)

2. A catalytic converter according to claim 1, wherein a plurality of hollow domes (7) are provided on each of said oppositely disposed wall (5, 6) of said housing (2), and wherein the hollow domes (7) on one of said walls (5, 6) extend into spaces between the hollow domes of the oppositely disposed wall (6, 5)

3. A catalytic converter according to claim 1, wherein said housing (2) is composed of two shell portions (3, 4), each of which is provided with one of said oppositely disposed walls (5, 6).

4. A catalytic converter according to claim 3, wherein said shell portions (3, 4) are one-piece drawn parts of plate metal.

5. A catalytic converter according to claim 1, wherein said hollow domes (7) have an essentially cylindrical configuration.

6. A catalytic converter according to claim 5, wherein said hollow domes (7) have a conical configuration that tapers towards said free ends thereof.

5 7. A catalytic converter according to claim 1, wherein said free ends of said hollow domes (7) extend nearly to the oppositely disposed wall (5,6) while forming a flow gap (13).

8. A catalytic converter according to claim 7, wherein the flow gap (13) of outwardly disposed ones of said hollow domes (7) has a reduced cross-section.

10 9. A catalytic converter according to claim 1, wherein outer surfaces of said hollow domes (7) are provided with a catalytically active coating.

10. A catalytic converter according to claim 3, wherein said shell portions (3, 4) rest against one another via a peripheral flange collar (15).

15 11. A catalytic converter according to claim 10, wherein said shell portions (3,4) are connected by means of an edge bead (17) in the vicinity of said flange collar (15).

12. A catalytic converter according to claim 10, wherein one of said shell portions (4) has a pot-shaped configuration and is provided with said flange collar (15) wherein the other of said shell portions (3) is provided with an abutment edge (16) that is guided beyond a region of one of said oppositely disposed walls (5) that is provided with said hollow domes (7) and wherein said abutment edge (16) has the dimensions of said flange collar (15).

13. A catalytic converter according to claim 1, wherein said outlet means (8) provided on said free ends of said hollow domes (7) form an outlet for said catalytic converter.

14. A catalytic converter according to claim 1, which is embodied for use in a muffler (20) and forms an inlet of said muffler.

5 15. A catalytic converter according to claim 14, wherein when said catalytic converter is installed in said muffler (20), an inlet means (10) of said housing (2) in the form of an inlet window is disposed at the same level as an inlet opening (21) of said muffler (20).

10 16. A catalytic converter according to claim 14, wherein said housing (2) is provided with aligned holes (27) for receiving fixing or mounting elements that extend through said housing (2).